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**LBSC 708N**

**Design Workout 2: Paper Prototype**

**TV Show Mood:** Find any television  
show by one's mood

# Why a Paper Prototype?

- Cost-effective and faster to study an interface before programming it or mocking it up on a computer [1]
- Effective to find issues in usability [2]
  - Should this be clickable or not?
  - Where do I do such function?
- See if design is navigable [2]
  - Able to understand basic functions such as adding a TV show to favorite or removing history.
- Is the wording understandable? [2]
  - Are the buttons' names logical?
- Easy to critique the design since not hard coded [1]
  - Faster to perform changes since no actual programming is occurring

## Mobile App: TV Show Mood

What is this app  
exactly?!?



# Good Question!

- TV Show Mood allows one to search for TV shows based on his/her particular mood.
- The results are listed by frequency to which the mood occurs in a TV show's plot.
- The time of day and user's location affect the results he/she sees.

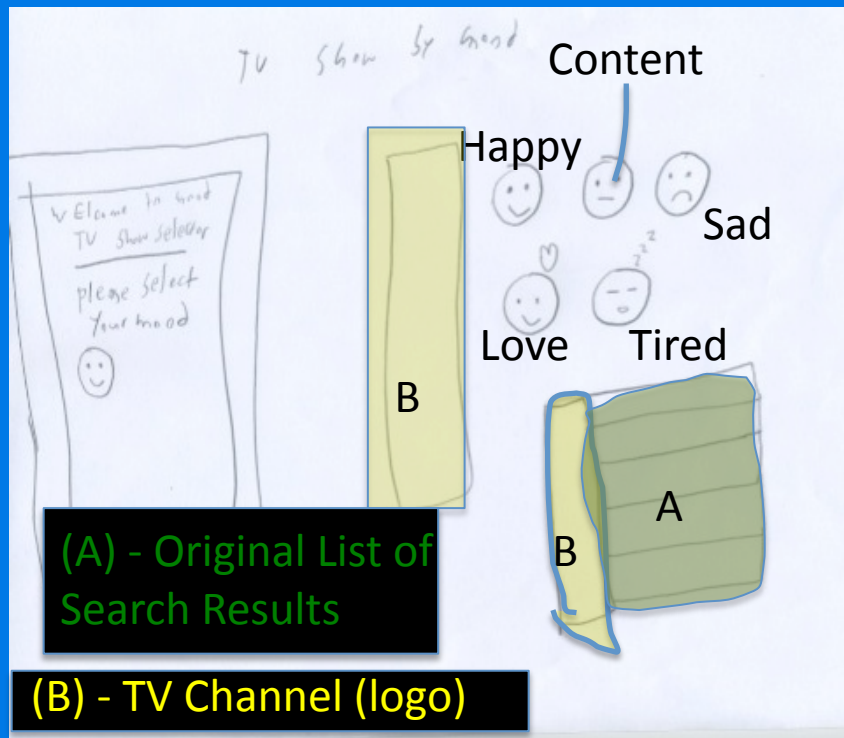
# TV Show Mood: Explained

- The program utilizes an advance algorithm to find TV shows based on one's mood.
  - Behind the scenes and therefore not visible in the prototype.
- The information is powered by IMDB (International Movie Database) and Wikipedia.
- The shows are ordered from the highest frequency to lowest frequency of the presence of the selected mood (i.e. – sad, happy, angry, etc.) in a TV show's plot.
  - How often is the particular mood present in a TV show's plot.

# TV Show Mood: Explained

- The user is able to favorite a show for future reference.
- People can see TV show pages they previous visited in the History page.
- Only basic settings are available.
  - Reset favorite
  - Clear history
  - Select another location or television provider

# TV Show Mood – First Iteration



- This is the initial iteration of my paper prototype.
- I initially utilized smiley faces to describe one's mood; however, cultural and other issues such as confusion and ambiguity of faces led me to remove them.

# TV Show Mood – Second Interaction: First Startup



- Entrance screen has a large green “Go” button to clearly mark where to touch next.
- This text warns the user that he/she only sees this information on the first startup.

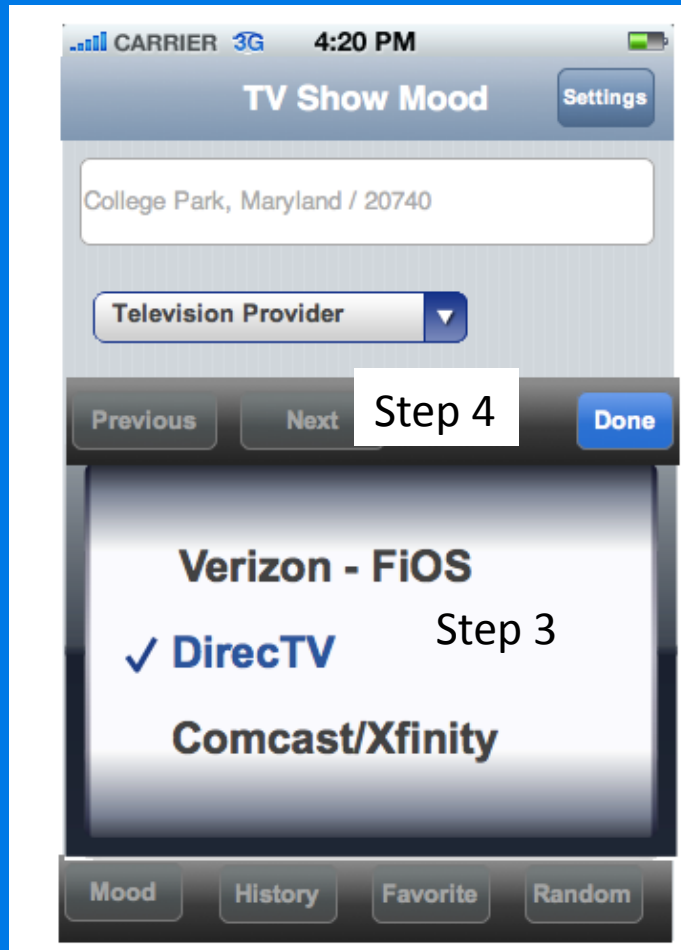


# TV Show Mood – Type Location



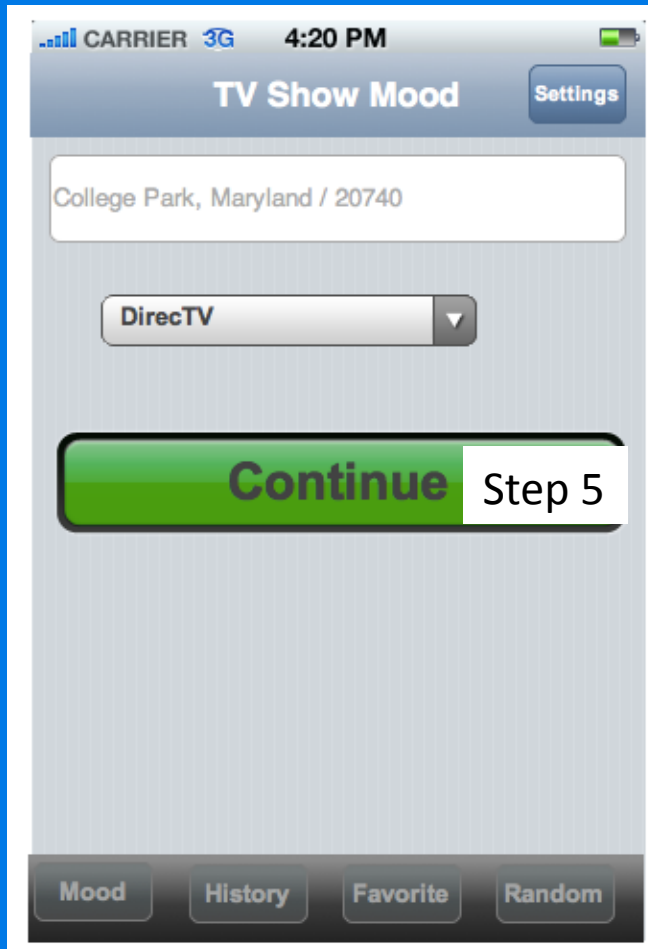
- This is the second screen where the user inputs his/her location to show appropriate show times.
- The keyboard automatically opens.
- **Step 1** – The user inputs his/her location.
- **Step 2** – The Television Provider drop-down menu.

# TV Show Mood – Select TV Provider



- **Step 3** - The user sees a scrollable list of his/her available television providers.
  - Since this is a prototype and the purpose is to test the user interface, only 3 options are available – but only DirectTV is “clickable.”
- A TV provider is selected to show a TV show's appropriate channel number.
- **Step 4** - He/she selects done after picking his/her provider.

# TV Show Mood – Continue Input

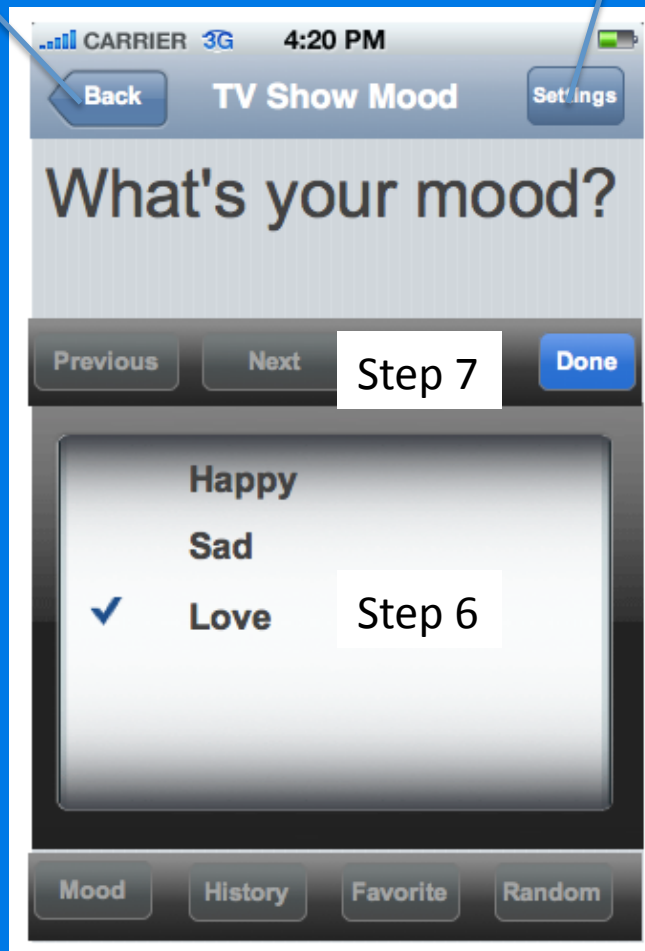


- **Step 5** - The user selects “Continue” to move to the mood selection screen.
  - This is done to ensure that the user enters all the required information to continue on to the next step.
    - If the information is not complete, a warning dialogue will appear asking him/her to complete the missing information.

# TV Show Mood – Select Mood

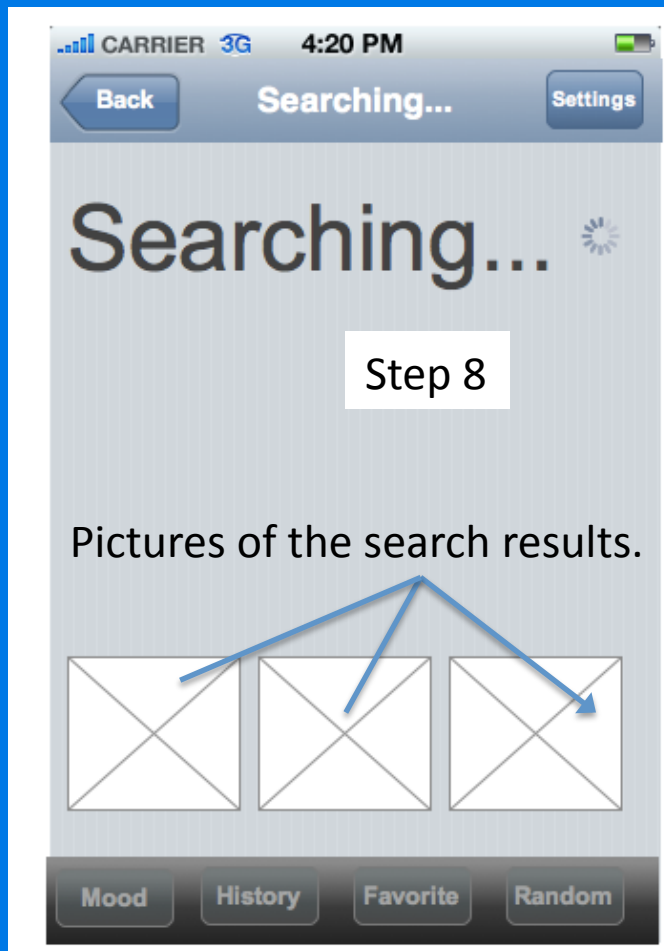
Back goes to the previous screen

Goes to the settings page



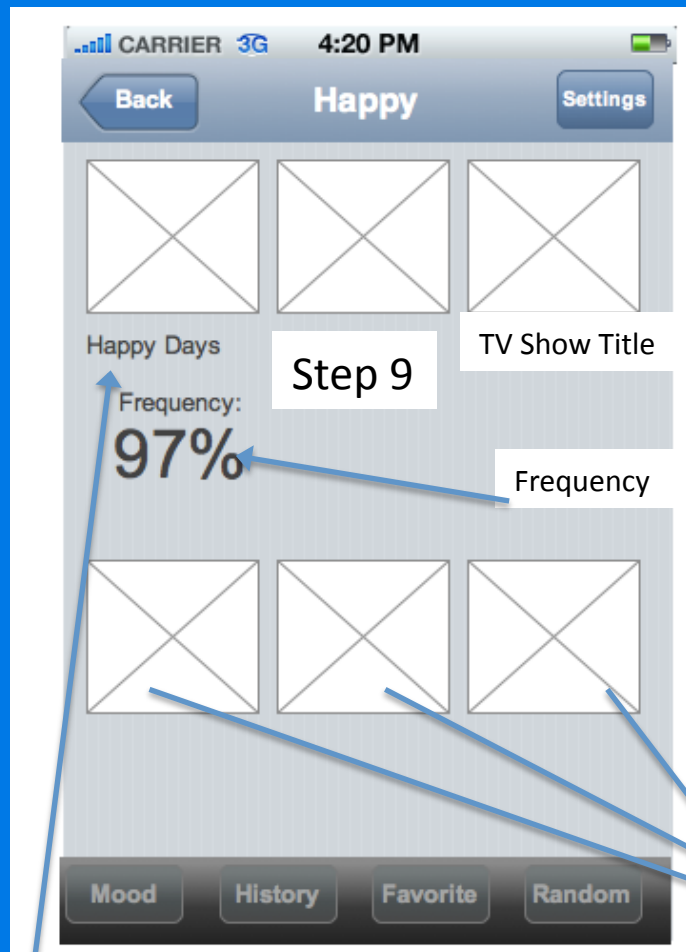
- **Step 6** - The participant selects his/her current mood.
  - Since this is a prototype and the purpose is to test the user interface, only 3 options are available.
- **Step 7** – The user now clicks done and the program automatically proceeds to the next screen.

# TV Show Mood – Searching Screen



- **Step 8** – There is no user interaction in this step. Its only purpose is to inform the user that appropriate TV shows for his/her mood are being searched.
- The words “Searching...” and a spinning wheel aid in confirming the program is actually searching.
- Three continuously changing photos of TV shows related to the selected mood scroll while the search occurs.
  - This is done purely for visual pleasure and to illustrate the program is actually searching too.

# TV Show Mood – Search Results

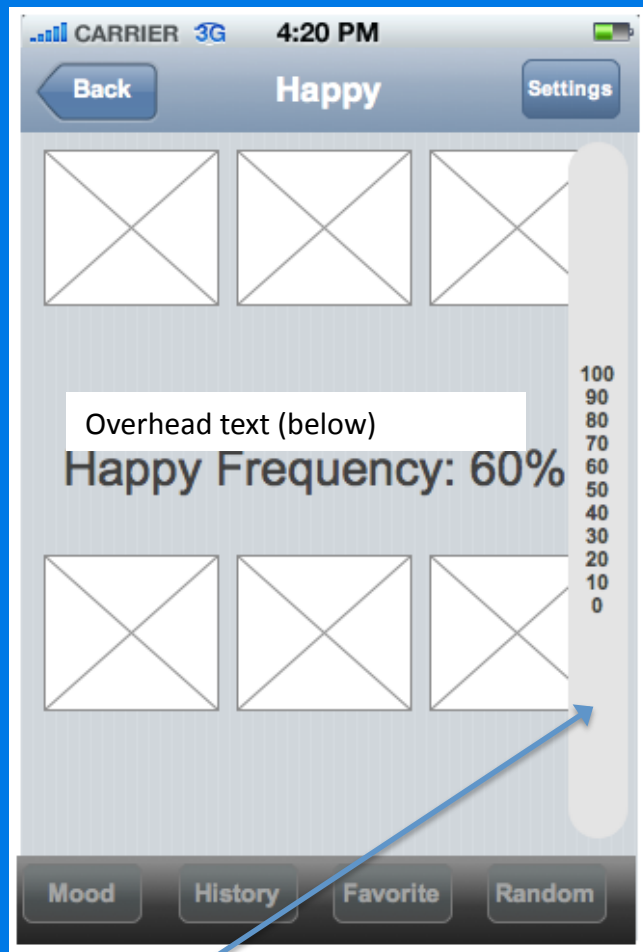


TV Show title

- **Step 9** – The user selects his/her TV show.
  - Again, since this is a prototype and the purpose is to test the user interface, only 1 option is available.
- **Frequency** – Shows the percent the selected mood occurs in the TV show's plot

Picture of the TV Show

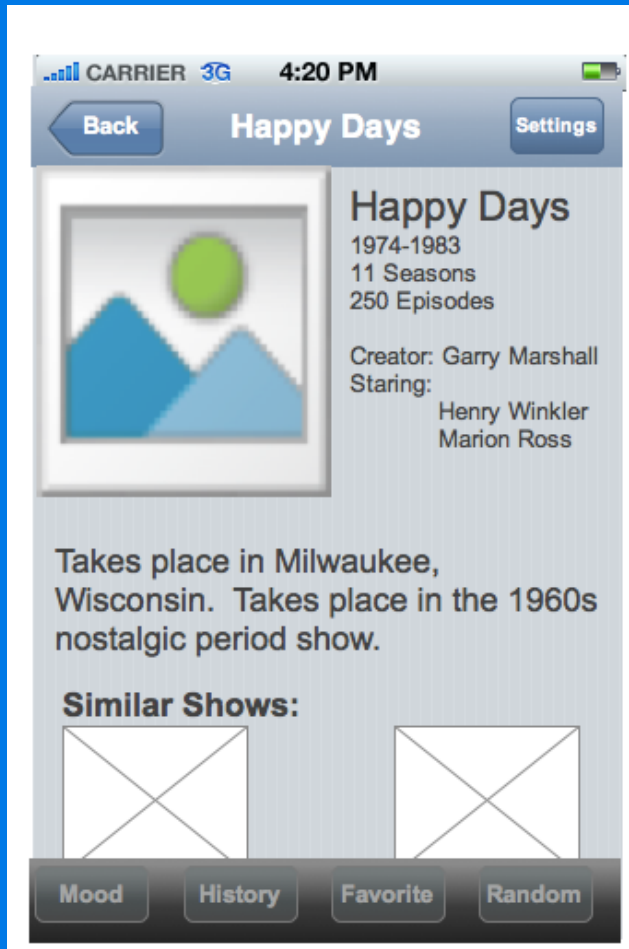
# TV Show Mood – Search Cont.



- This is a screenshot of what happens when one scrolls in the search results.
- Overhead text shows the area's frequency
- TV shows are ordered from the highest frequency to lowest frequency of the presence of the selected mood (i.e. – sad, happy, angry, etc.)
  - How often is the particular mood present in the plot of the TV show.

Scroll bar by frequency (in percent)

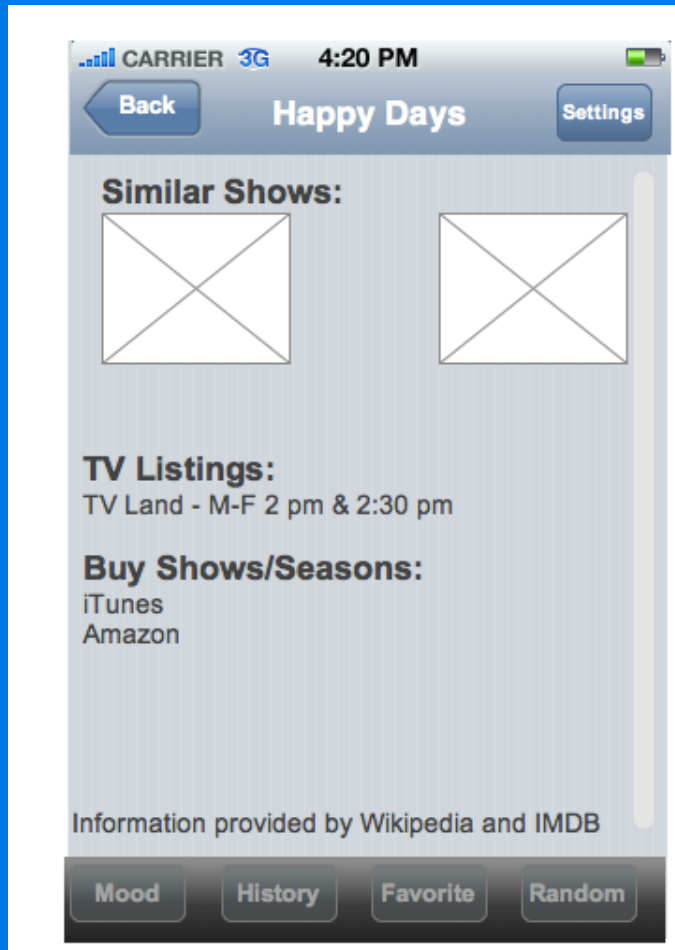
# TV Show Mood – TV Show Exp.



- There are no more steps since this is a TV Show page.
  - No more searching occurs.
- A basic example of a TV show's page
- Offers the show's description
  - Synopsis
  - Information about the cast, producers, and directors.
  - Run date and number of episodes.
- Links to similar shows.
  - Picture of the show
  - Title under the picture

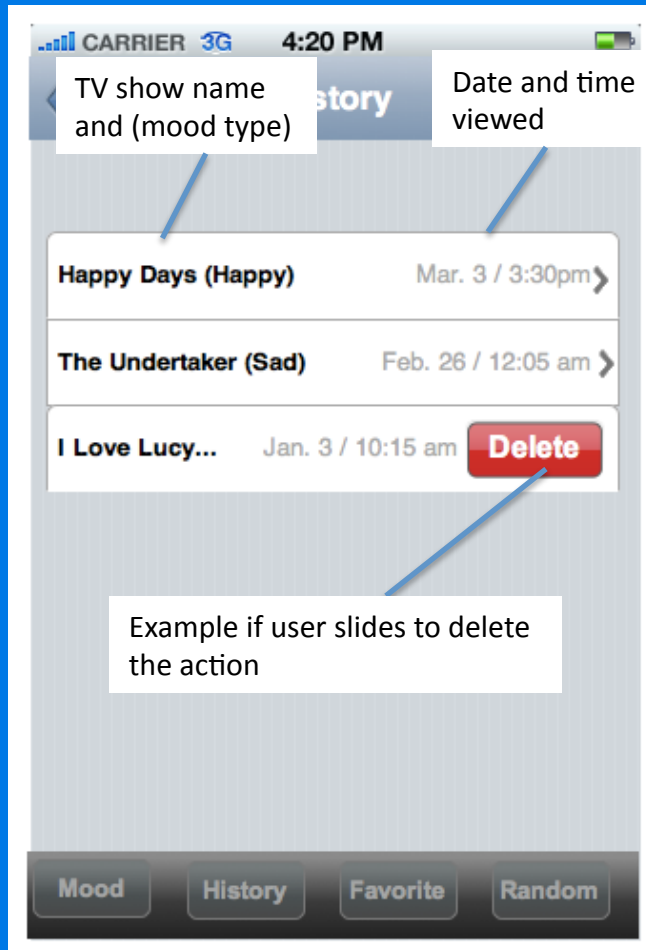


# TV Show Mood – TV Show Exp.



- A continuation if one scrolls in the TV show's page.
- Includes a listing of when and where the TV show is on.
  - This function utilizes one's location and TV provider information.
  - Such information can be added to his/her calendar
- The buy links allow one to watch the show online or buy a physical copy if applicable.

# TV Show Mood – History

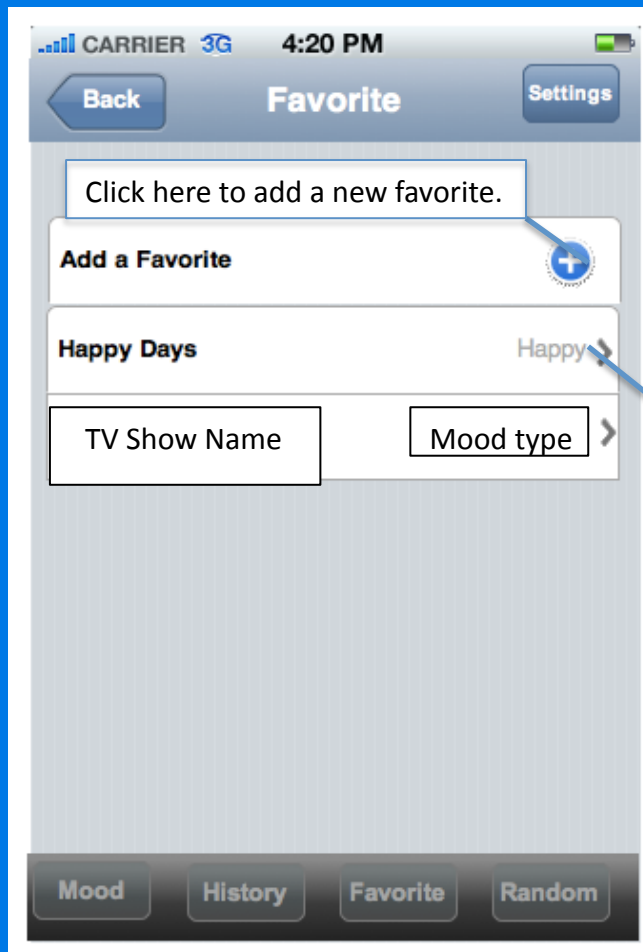


- This is where the user sees the previous TV show pages that he/she viewed.



Example of sliding finger

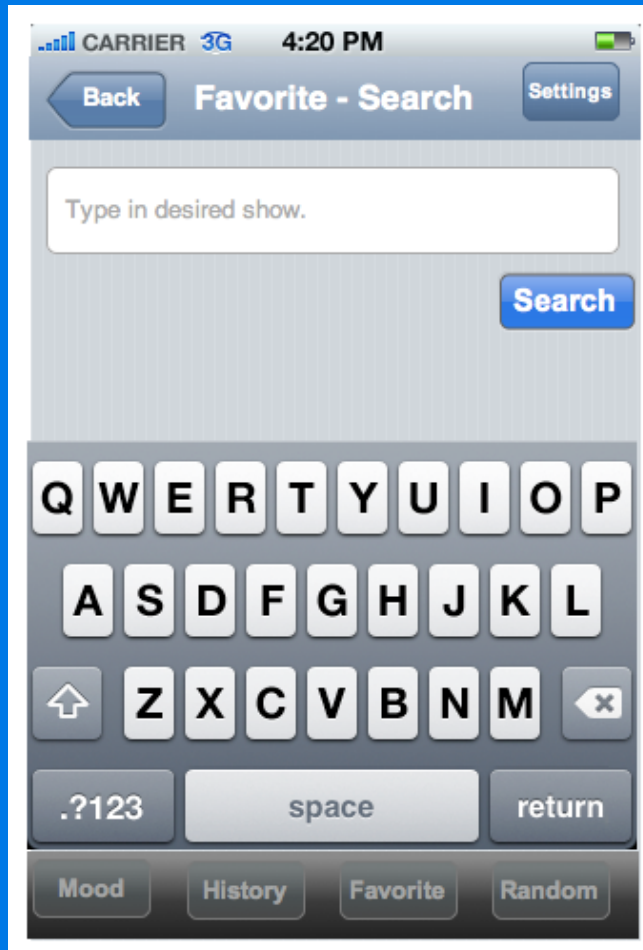
# TV Show Mood – Favorite



- Currently the only area where a user can add a favorite TV show.
- Favorite TV shows are links back to a TV show's page

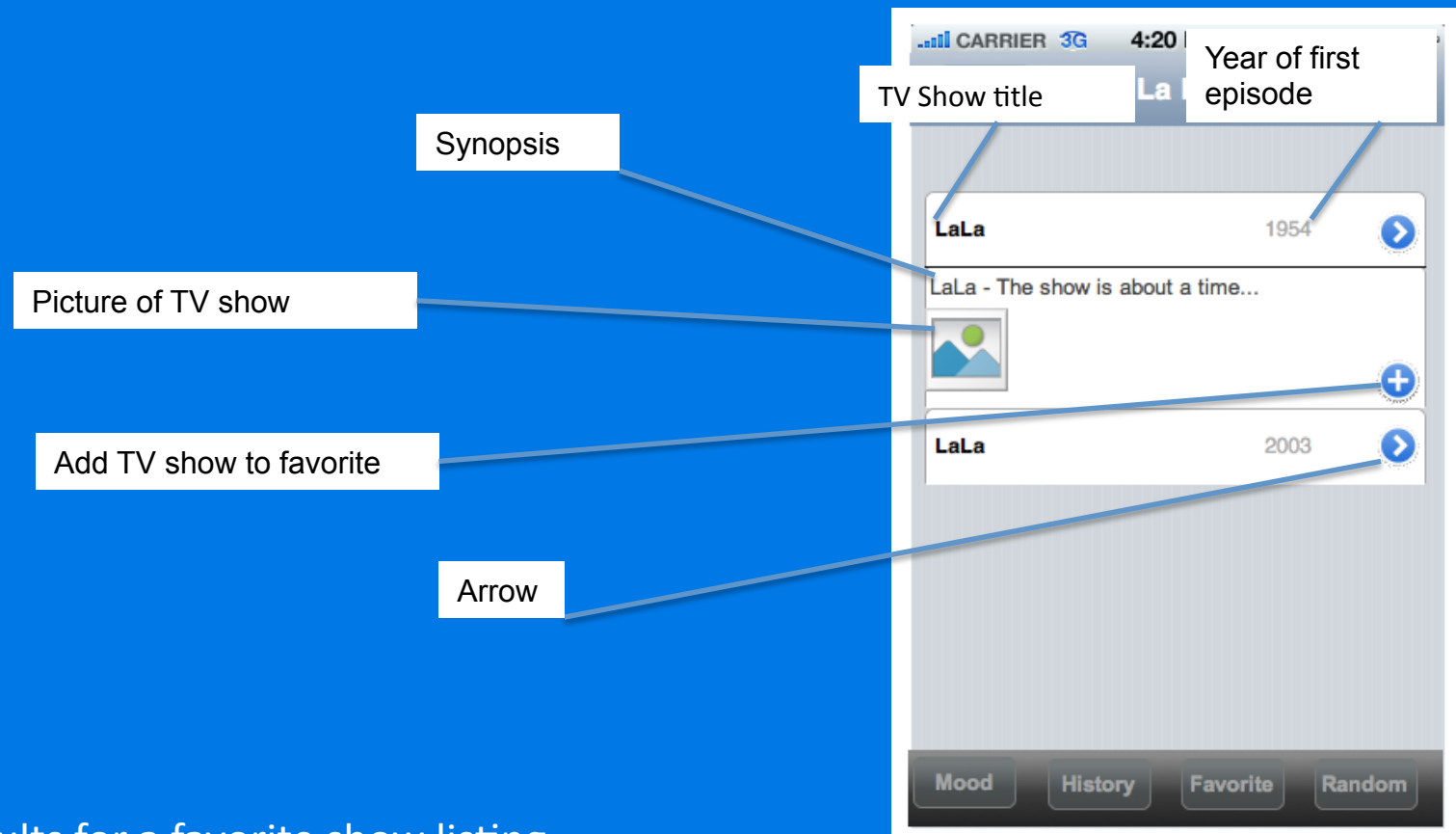
Clicking the arrow goes to the TV show's page.

# TV Show Mood – Favorite Search



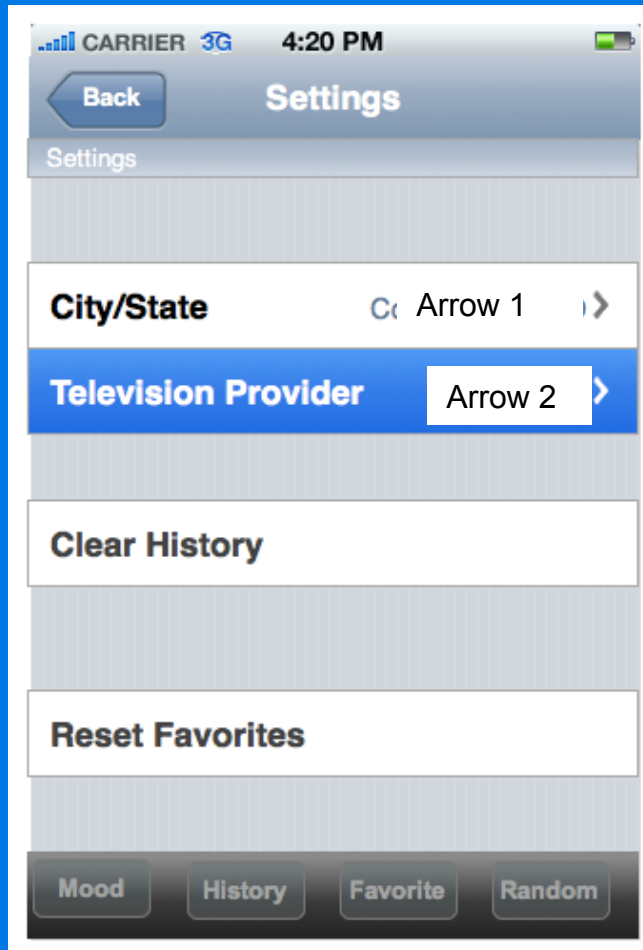
- The user types in the desired TV show he/she wishes to add to favorite.
- The keyboard comes up automatically.

# TV Show Mood – Fav. Search Results



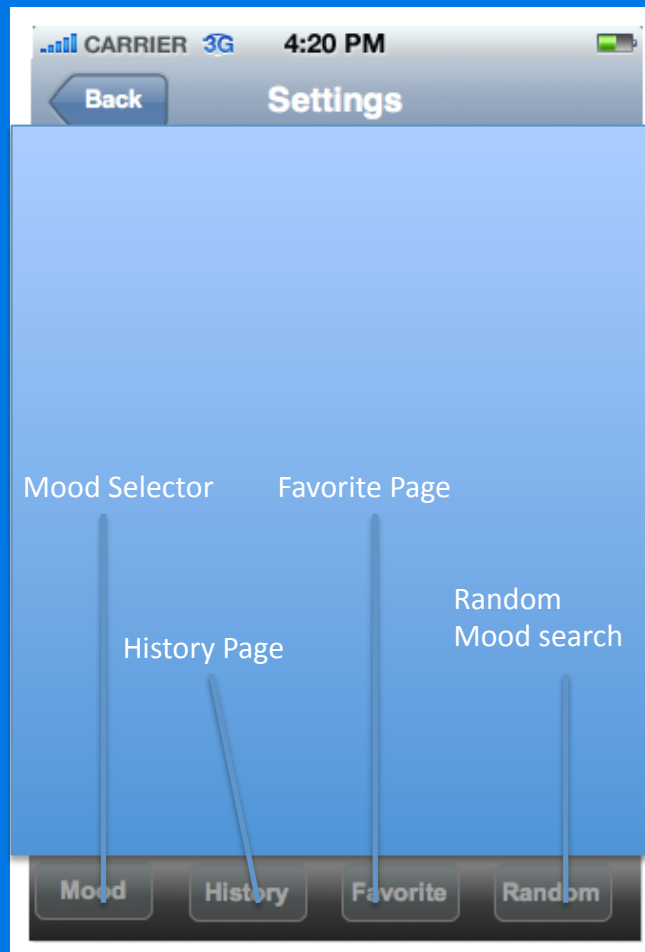
- The search results for a favorite show listing.
- Clicking the “arrow” expands the results and allows the user to add the show to his/her favorites.
  - He/she clicks the “plus” button to add the show to his/her favorites

# TV Show Mood – Settings



- The settings page allows one to select another location (city/state) (arrow 1) or television provider (arrow 2).
- One can also clear his/her history or rest (remove all) his/her favorites.

# TV Show Mood – Bottom Buttons



- **Mood** – Allows a user to change the mood he/she feels when searching.
- **History** – Gives a user the option to see the previous TV show pages he/she visits.
- **Favorite** – The TV shows that one likes for quick reference.
- **Random** – Searches TV shows by a random mood type.

# Hypothesis

- People will easily understand the concept of picking a TV show by his/her mood.
- Each task will be completed in under a minute.
- Users will be able to effortlessly add a show to his/her favorite.
- Easily remove a show from history.
- Understand the location where all favorites can be removed.
- The participant will know what action the random button performs.





# Selected Task for Study

- 1. Enter city/state and select correct television provider
- 2. Pick specific mood type
- 3. Read a synopsis of a TV show
- 4. Look at history
- 5. Add a favorite TV show
- 6. Erase user settings

# User-Base

- Study of five potential users.
- The users are able to operate an iOS-based device.
- Enjoy watching TV shows.
- Are either an undergraduate or graduate student
- 1 Female
- 4 Males
- 2 Undergraduates
- 3 Graduates

# The User Test

Now the test!



## User 1 – Female – Graduate Student

- Unsure of what the “%” under each TV show’s title means.
- When visiting history she could not understand if it is the history about a TV show or the history of pages she visits.
- Confusion as to what action the “random” button performs.
  - Is it a random mood or random TV show?

## User 2 – Male – Graduate Student

- Difficulty in adding a show to favorites.
  - Wished for a favorite function on every page.
- Unaware of the history function (did not see bottom row of buttons)
- Confusion of random button
- Had difficulty in erasing entire history
  - Did not think to go to settings to erase history
  - Tried to perform the action in the history page

## User 3 – Male – Undergraduate Student

- Confusion with the “Continue” button after entering location and TV provider.
  - Done to clarify that all his/her information is correctly inputted
- Did not know where to look to add a show to favorite.
- Had trouble resetting all favorites
  - Thought the action could be performed on the favorites page → Must go to settings menu

## User 4 – Male – Undergraduate Student

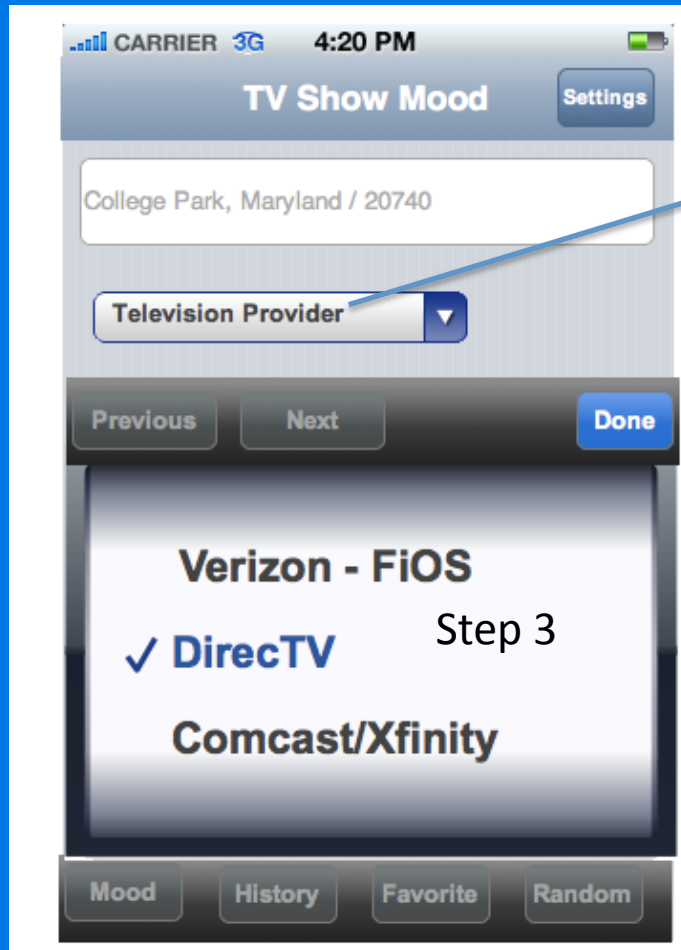
- Similar to others, he could not easily favorite a TV show.
  - Thought one could favorite a show inside a TV show's actual page.
- Unsure of what action the “random” button does
  - Thinks it randomly picks a TV show
- Again, similar to others, could not erase all history easily.
  - This function is in the settings menu.

## User 5 – Male – Graduate Student

- Confusion as to what the “%” means under each search result.
  - It means the frequency to which the type of mood appears in a TV show’s plot
- The “random” button “makes no sense”
  - Thought it would make the application do something random such as open the settings menu.



## User 5 – Male – Graduate Student Cont.



- Thinks the words “Television Provider” should be a separated from the list; therefore, not inside the scrollable list.
- Desires a search function inside the favorite page to more easily add a TV show to favorite.

# Conclusive Findings

## Note: Task Errors!

- Did not realize till last person that my questions were leading.
  - Rewrote questions to more real-life interaction, but I could not use them since I already tested four other participants.



## Rewritten Questions

- 1. Find a television show by your current mood
- 2. You like a TV Show and want it for easy reference. How do you do that?
- 3. You dislike all your past favorite TV shows. Remove them all.
- 4. Where can you see TV show pages you previously visited?

# What Users Dislike ☹️



- The bottom buttons are too vague.
  - Most users do not understand what the mood button does
- Unsure what the random function does.
  - Searches TV shows based on a random mood
- Issues with adding a TV show for future reference
- No way to offer feedback on results (thumbs up or down)
  - To improve search results accuracy
    - Maybe a show is not of the particular mood type or has less of the mood type.

# What Users Like 😊

- Easy to navigate
- The concept
  - Not related to the navigation
- Once found, easy to favorite pages.



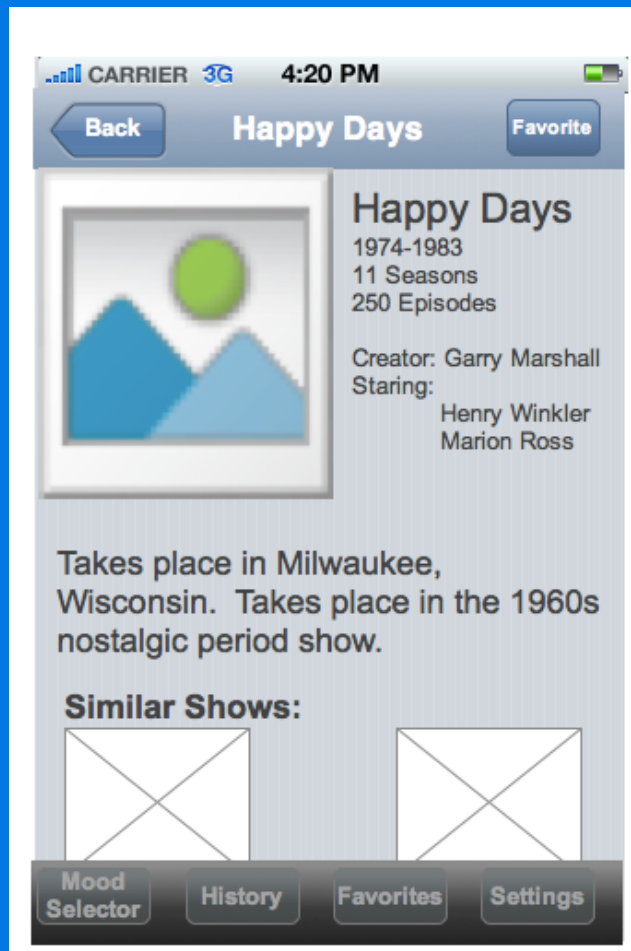
# Implications for Future Design Iterations

- A better means to favorite TV shows is necessary
  - Able to favorite a show within the TV show's page.
- Create less ambiguous language for the bottom buttons.
- Ability to remove individual favorites from the favorite page.
- Explanation of the “%” frequency.
  - Must be clearer
  - Possibly offer an introductory video to the app's functions.
- Ability to remove entire history from the history page.
  - Currently must go to the settings menu to erase all history.

# Implications for Future Design Iterations

- Removal of the “random” button
  - There is way too much confusion to its purpose
  - Replace “random” button with “settings” button.
- Offer a function to search for TV shows without going to mood selector.
  - Able to show the mood percentage on a TV show’s page.
- Offer videos of the TV show on its page.
- Better mechanism to allow for user input in search results.
  - Way to state a show’s mood is incorrect/correct.

# Implications for Future Design Iterations



- Favorite should be on the top bar to always be visible on a TV show page.
  - Allows user to easily favorite a show.
  - Change Favorite to Favorites.
- Settings should be located in bottom right area.

# References

- 1. Bolchini, D., Pulido, D., & Faiola, A. (2009). FEATURE“Paper in screen” prototyping. *interactions*, 16, 29. doi:10.1145/1551986.1551992
- 2. Hendry, D. G., Mackenzie, S., Kurth, A., Spielberg, F., & Larkin, J. (2005). Evaluating paper prototypes on the street (p. 1447). ACM Press. doi:10.1145/1056808.1056938